5. Deployment Phase

Solution Life Cycle

Phases	Vision	Definition	Construction	Deployment	Support & Retirement
Results	Problem Assessment	System Requirements	Detailed Design	Deployed Solution	Production Services
	Solution Recommendation	Preliminary Design	Accepted Solution		

A summary of SLC recommendations to use during the Deployment Phase is contained within the following matrix.

Phase	SLC Recommendations
OBJECTIVE	Deploy the developed solution into production for utilization by the user community.
ENTRY CRITERIA	- The Requirements Traceability Matrix is updated. - A Detailed Design Document has been developed and approved. - System Security Checklist - Construction Phase has been completed and approved. - Test Plans have been developed. - A developed and tested solution, including source, object, and execution code has been accepted. - PRR has been conducted and signed off. - The ECM migration to production CR has been scheduled. - Configuration Item Index has been updated and baselined. - Development CRs have been submitted to Data Center using ECM Tool. - PRR documentation has been submitted for posting to the Enterprise Repository. - Support Organization has been identified.

Phase	SLC Recommendations
PROCESS AND OUTPUTS * Sample is provided in Appendix A	**Solution Acquisition Planning (as needed)** • Updated Work Breakdown Structure **Solution Acquisition Project Management (ongoing)** **Transition to Support** • Deployed Solution • Project inventory list • Support readiness orientation • Transition sign-off • Conduct User Training • ECM Tool Process & Training materials • Service Level Agreements* **System Security** • Final System Security Plan • SLC Security Deployment Phase Checklist • Risk Assessment Corrected Action Plan completed **Quality Assurance** • QA reviews **Configuration Management** • Baselined and migrated Configuration Item to VDC • CR submitted to move application into production
ROLES AND RESPONSIBILITIES	**The following roles will participate in this phase, and are defined in the Deployment Roles and Responsibilities section:** CIO IT Services Configuration Management (CM) Lead Executive Sponsor Executive Steering Committee Integrated Product Team (IPT) Project Manager Quality Assurance (QA) Lead System Security Officer Technical Architecture Lead Transition to Support (TTS) Lead

Phase	SLC Recommendations
EXIT CRITERIA	**The following are critical exit criteria for this phase:** • Solution has been successfully deployed. • Project inventory list is complete. • CR to move application into production is successfully completed. • TTS Lead has been provided with ECM Tool Process and Training materials. • Support personnel have obtained ECM User IDs and have completed ECM Solution training. • TTS readiness review is completed. • Transition sign-off is completed. • SLC Security Checklist - Deployment Phase is completed and approved. • System Security Plan is complete. • Configuration Item Index baselined and migrated. **The following are recommended exit criteria for this phase:** • Applicable training has been conducted. • Arrangements have been made with the organization(s) responsible for operating and maintaining the solution (SLAs have been established). • QA Reviews have been conducted as documented in the QA plan.
JOB AIDS	• SLC Security Deployment Phase Checklist • FSA Infrastructure Change Management Impact Analysis Worksheet

Deployment Phase Objective

The objective of the Deployment Phase is to place the system in production and enable the organizational adoption of a solution. The Deployment Phase transitions a solution from development and acceptance to production. At the conclusion of the Deployment Phase, the new system is considered in "Production" and the Support & Retirement Phase commences.

As with the Construction Phase, the decision to develop and implement a custom solution, versus a COTS-based solution, or one involving an ASP, with impact the activities in this phase. The processes and outputs documented in the Construction section and Deployment section of this Guide apply to IPTs that have made the decision to implement the solution via custom development or using COTS software. Implementing with an ASP will enable the IPT to skip some of the processes and outputs associated with the Construction and Deployment Phases of the SLC.

The following topics and processes will be addressed in this phase of the life cycle:

- Entry Criteria;
- Process and Outputs;
- Roles and Responsibilities;
- Exit Criteria; and
- Job Aids.

Deployment Phase Entry Criteria

Before work in the Deployment Phase can begin, the exit criteria from the Construction Phase must be completed. To review, these are:

- The Requirements Traceability Matrix has been updated.
- A Detailed Design Document has been developed and approved.
- System Security Checklist - Construction Phase has been completed and approved.
- Test Plans have been developed.
- A developed and tested solution, including source, object, and execution code has been accepted.
- PRR has been conducted and signed off.
- The ECM migration to production CR has been scheduled.
- PRR documentation has been submitted for posting to the Enterprise Repository.
- Configuration Item Index has been updated and baselined.
- Development CRs have been submitted to Data Center using ECM Tool.
- Support Organization has been identified.
- QA Reviews have been conducted as documented in the QA plan.

Deployment Phase Process and Outputs

Once the PRR has been successfully completed at the end of the Construction Phase, the actual deployment activities will commence. For FSA applications, all deployment activities are the responsibility of the organization responsible for operating the application. For the majority of FSA applications, this will be the VDC. Therefore, the deployment procedures required by the VDC should be followed. For FSA applications not deployed at the VDC, the procedures of the operations organization should be followed. All Data Center activity will be updated as part of the CR tracking and management process. As part of the PRR Planning Process, the CR to move application into production is submitted using the ECM Tool.

Solution Acquisition Planning is conducted as needed. Solution Acquisition Planning Management is ongoing, and status reporting, risks and issues tracking continue. QA reviews and Configuration Management items are baselined and migrated to the VDC.

Transition to Support (TTS)

The purpose of Transition to Support is to plan, manage, and complete support readiness activities.

The TTS Lead monitors the transition cut over to ensure a seamless transition. A project inventory list is produced by the development organization and reviewed with the Support Organization. Also, the TTS Lead updates the Transition Readiness Review document, schedules, and conducts the review and secures Executive Sponsor sign-off once complete. The TTS Lead is also provided with ECM Tool Process & Training materials. TTS Lead must identify users of the system and complete the ECM User ID Process.

Additional activities include the establishment of Service Level Agreements (SLAs) with the operational architecture hardware and software vendors, to ensure post-deployment support will be provided. If additional funding or contractor support is needed to support the solution, then the Business Case will need to be updated by the IPT and approved by the IRB and a new Statement of Objectives will need to be created in order to award a new Task Order for the Support & Retirement Phase. The processes and outputs for the Business Case, Statement of Objectives, and Task Order are addressed in the Vision Phase.

Once the system has been deployed, training may be required in order to allow the deployed solution to be fully utilized. This training may involve any number of audiences – end users, system administrators, operations and maintenance personnel, etc. The breadth and depth of training provided to each of these groups will vary by solution type, and therefore is not discussed in detail in this Guide.

The developing organization lists the latest version of controlled documents for the support organization to store when the support organization takes over maintaining the software.

System Security

In the Deployment Phase, several security-related activities introduced in prior phases should be brought to closure. The corrective action plan developed in the Construction phase risk assessment should be implemented. Once implemented, each Corrective Action Plan (CAP) element should be dated and initialed indicating completion of the element. The CAP should then be submitted to the SSO for maintenance.

In the Construction Phase, security controls were reviewed as they are documented. During deployment, the security controls should undergo a series of tests to determine if the controls were implemented properly and effectively. Initially, a security test plan should be developed.

Additionally, at the end of the Deployment Phase, the SLC Deployment Phase Checklist should be signed off by the SSO. The checklist represents the completion of all security related activities for the Deployment Phase. The activities include:

- Documented Completion of CAP from Construction Phase
- Security Test Plan
- Security Test Results
- Final System Security Authorization Agreement (SSAA)
- Certification Letter
- Signed Accreditation Letter
- Final System Security Plan
- Final Continuity of Operation Plan
- Final Disaster Recovery Plan
- User Training Schedule
- Approved User Access Request Forms

For more information regarding the SLC Security Deployment Phase Checklist, see the System Security Process Guide.

Deployment Phase Roles and Responsibilities

The following matrix is provided as a guide to the roles and responsibilities of the key personnel that are in the Deployment Phase of the life cycle.

Title	Role	Responsibility
CIO IT SERVICES	Liaison between the VDC and the IPT.	Ensure needed VDC services are met. Notify the VDC of any planning changes identified during this phase.
CM LEAD	Manage project CM activities.	Baseline and migrate CM Item Index.
EXECUTIVE SPONSOR	Solution Sponsor.	Ensure deployment results. Also, review and approve any changes made to the Business Performance Model, Solution Acquisition Plan, Business Case and new Task Order award.
EXECUTIVE STEERING COMMITTEE	Project Review and Recommendations.	Responsible for reviews and recommendations made throughout the delivery of the solution.
IPT	Solution Development and Delivery Team.	Deploy solution. Participate in TTS.

Title	Role	Responsibility
PROJECT MANAGER	Plan and manage the acquisition project	Implement acquisition project planning process in accordance with the Solution Acquisition Plan. Ensure that TTS Lead is provided with ECM Tool Process & Training materials
QA LEAD	Plan and manage QA reviews.	Ensure that the project is performing all necessary QA activities. Act as liaison between the FSA QA Team and the project team. The QA Project Manager is typically a member of the IPT and/or contracting team.
SYSTEM SECURITY OFFICER	Review and make security recommendations.	Work with the IPT Project Manager and others to ensure that the solution Preliminary Design meets the FSA's security requirements and complete all security documentation requirements.
TECHNICAL ARCHITECTURE LEAD	Manage CR activity	Submit, manage and track CR to move application into production
TTS LEAD	Transition the solution to support.	Manage the transition process in preparation for the Support & Retirement Phase.

Deployment Phase Exit Criteria

In the Deployment Phase, the rollout of the solution to the user community security and transition to support activities were discussed. Prior to the completion of the Deployment Phase, the following exit criteria must be met:

Critical:

- Solution has been successfully deployed.
- Project inventory list is baselined.
- TTS readiness review is completed.
- Transition sign-off is completed.
- SLC Security Checklist - Deployment Phase is completed and approved.
- CR to move application into production has been successfully completed.
- TTS Lead has been provided with ECM Tool Process & Training materials.
- Support personnel have obtained ECM User IDs and have completed ECM Solution training.
- System Security Plan is complete.
- Configuration Item Index has been baselined and migrated.

Recommended:

- Applicable training has been conducted.
- Arrangements have been made with the organization(s) responsible for operating and maintaining the solution (SLAs have been established).
- QA Reviews have been conducted as documented in the QA plan.

Deployment Phase Job Aids

The following job aids are available in the Process Guides:

- SLC Security Deployment Phase Checklist
- FSA Infrastructure Change Management Impact Analysis Worksheet